

FIG. 1

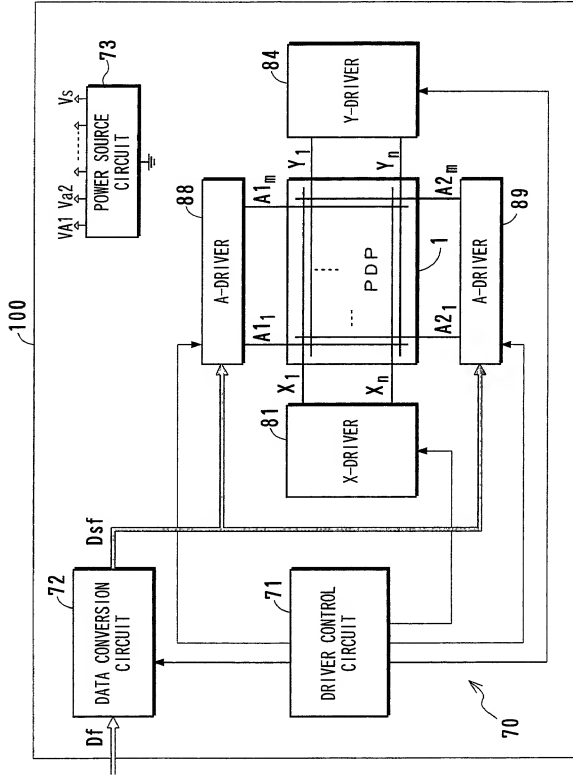


FIG. 2

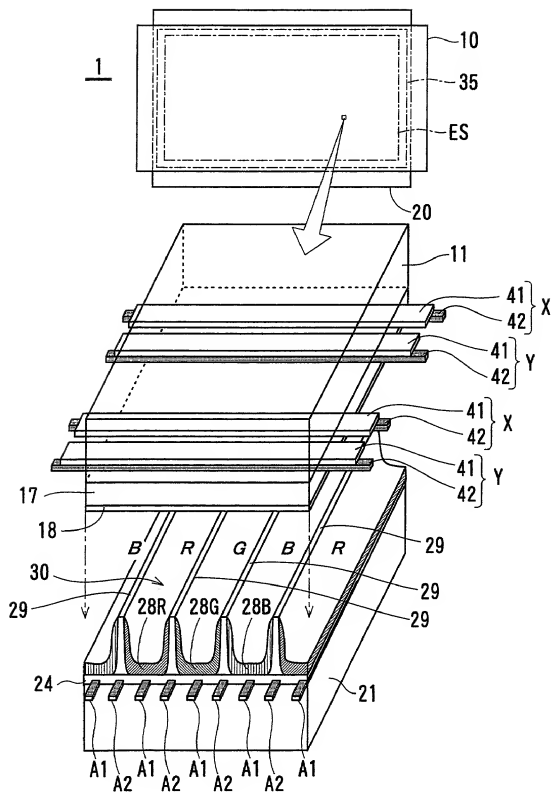


FIG. 3

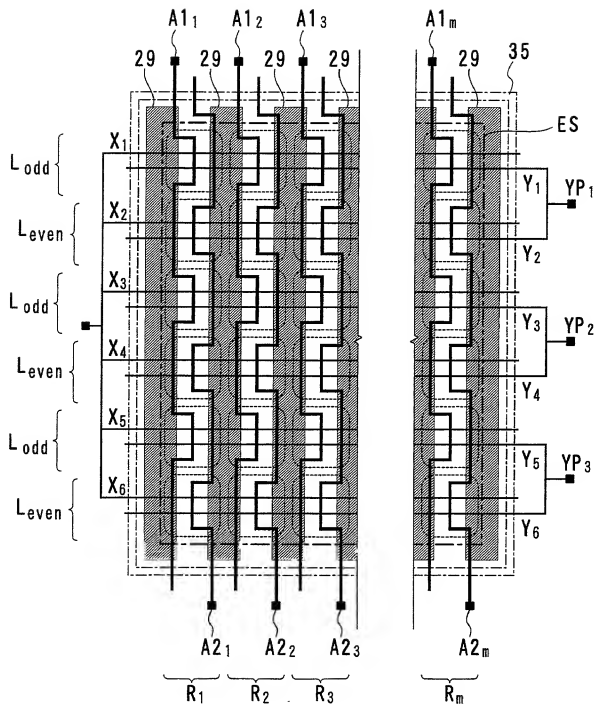


FIG. 6

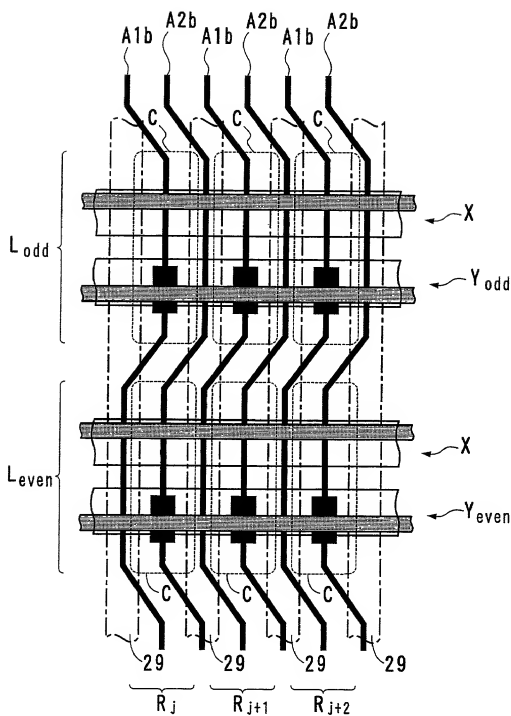


FIG. 7

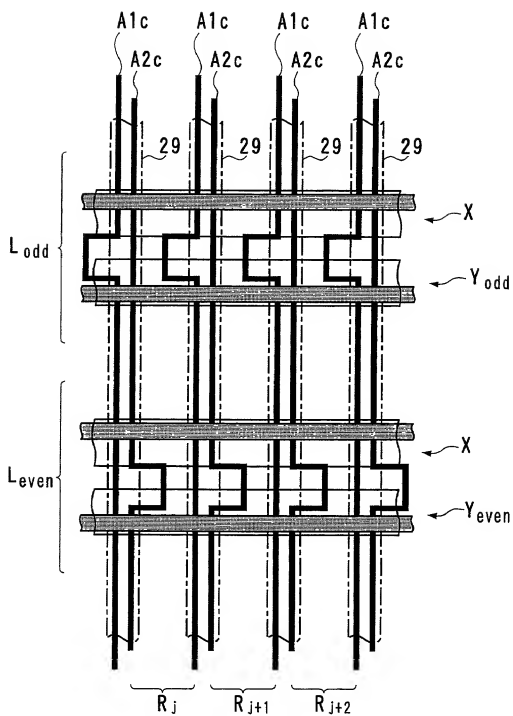


FIG. 8

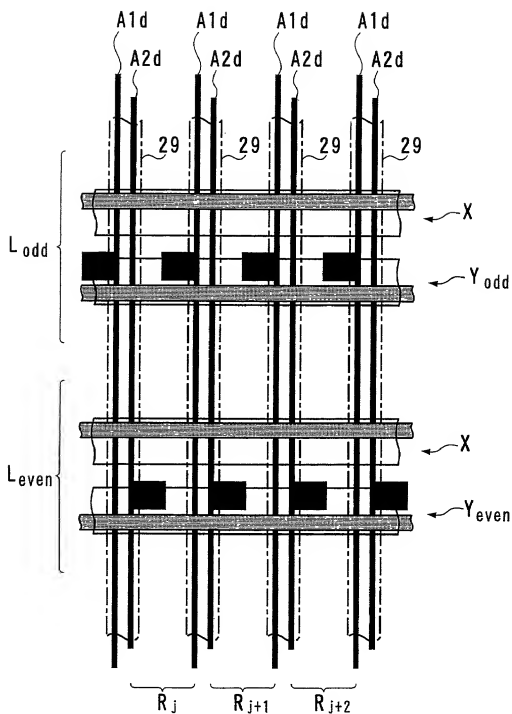


FIG. 9

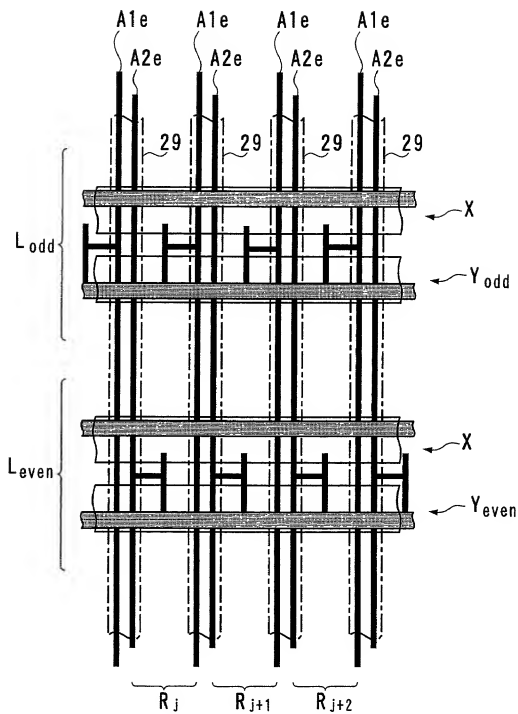
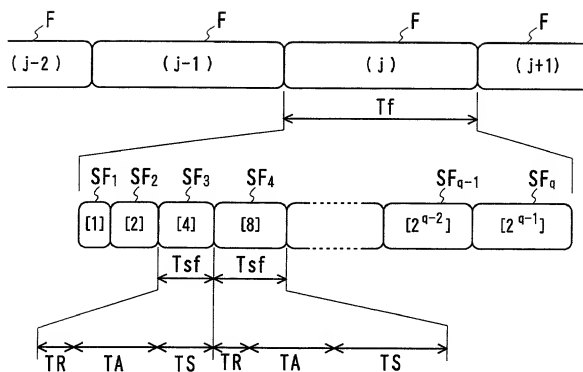


FIG. 10



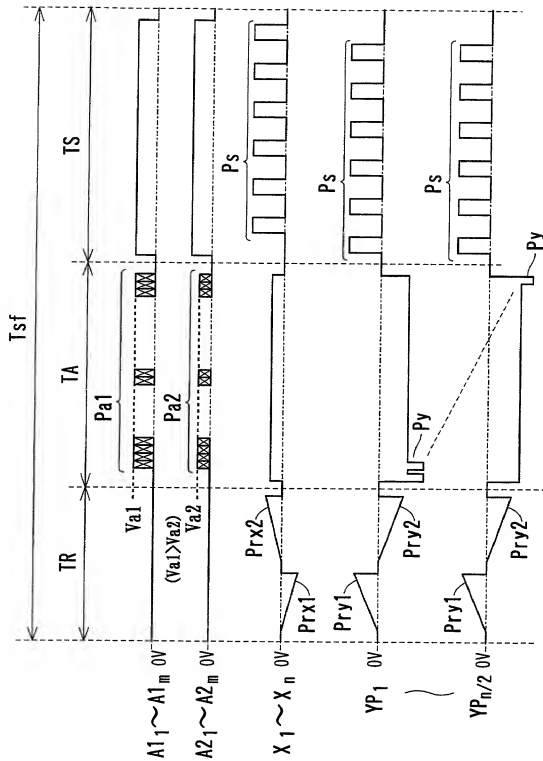


FIG. 12

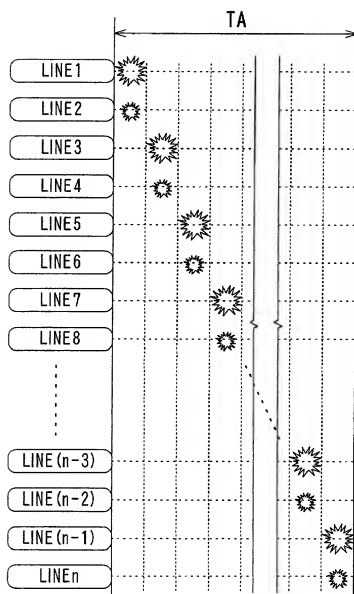


FIG. 13

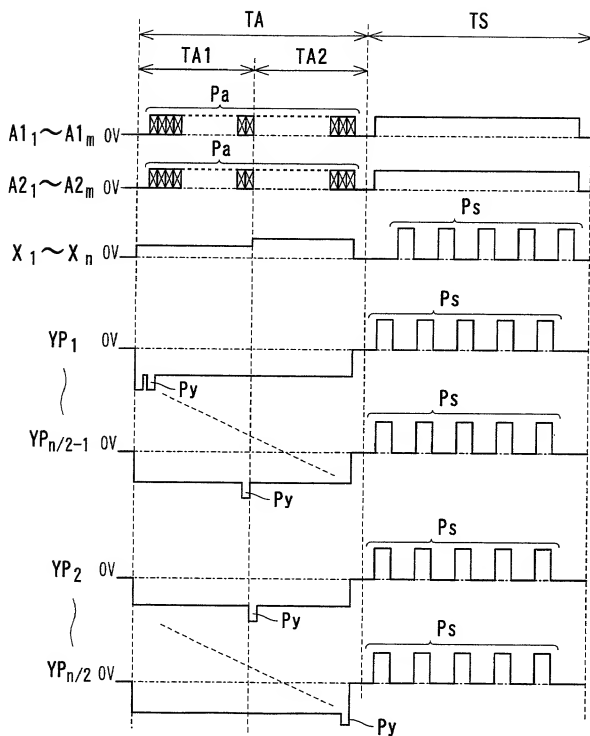


FIG. 14

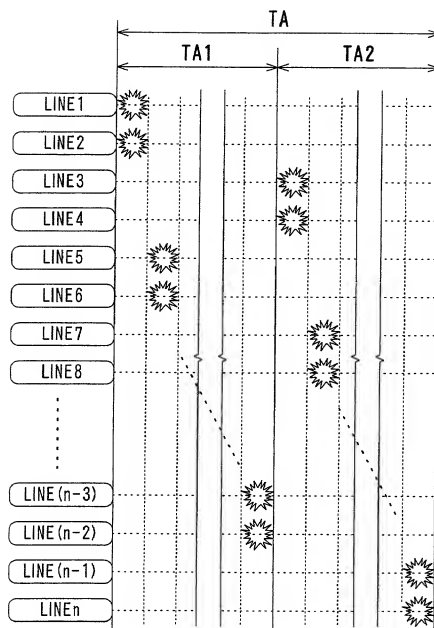


FIG. 15

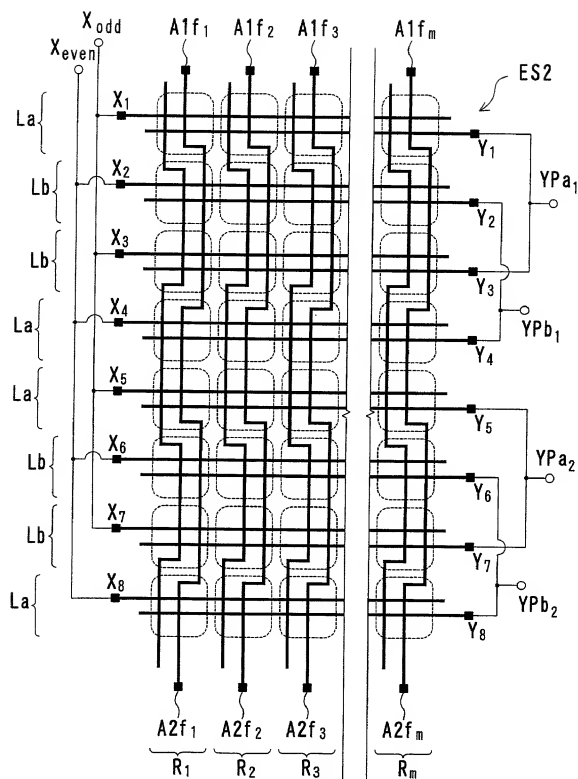


FIG. 16

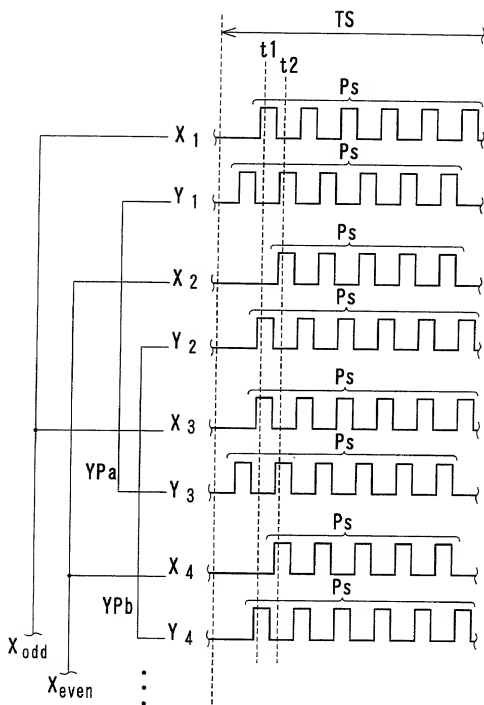


FIG. 17A

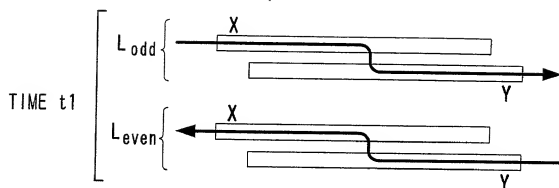


FIG. 17B

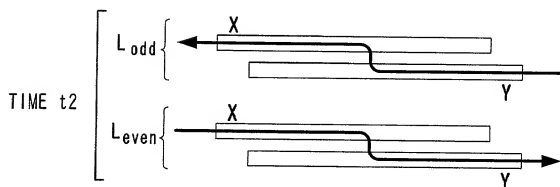


FIG. 18

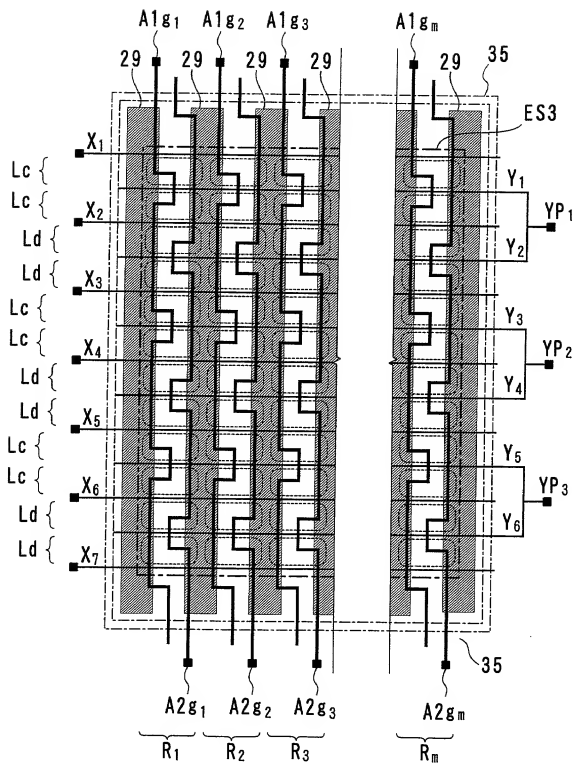
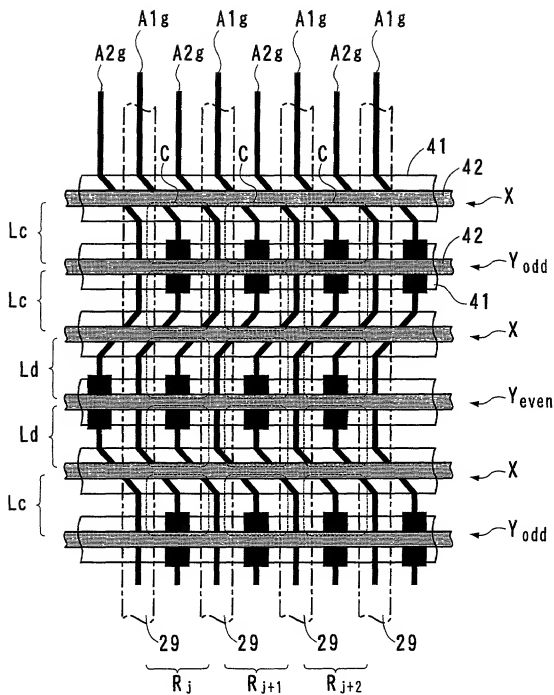


FIG. 19



Abstract The purpose of this study was to determine the effect of a 12-week training program on the heart rate (HR) and heart rate reserve (HRR) of sedentary middle-aged men. The subjects were randomly assigned to a control group (CON) and an exercise group (EX). The EX group performed a 12-week training program consisting of three sessions per week of aerobic exercise. The HR and HRR were measured at rest and during maximal exercise at baseline and at the end of the 12-week training program. The EX group showed a significant decrease in HR at rest and during maximal exercise, and a significant increase in HRR at rest and during maximal exercise, compared to the CON group. The results of this study suggest that a 12-week training program can improve the cardiovascular fitness of sedentary middle-aged men.

